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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,327	01/14/2002	Durga P. Satapathy	1441	9579

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EXAMINER	
LIN, WEN TAI	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/047,327	SATAPATHY ET AL.	
	Examiner	Art Unit	
	Wen-Tai Lin	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/26/2006*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *76-89* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *76-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 76 - 89 are presented for examination.

2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

3. It is noted that the rejection of claims 76-89 under U.S.C. 112 first paragraph in the previous office action is maintained (see paragraph 15 of this instant office action for details).

Claim Rejections - 35 USC § 102

4. Claims 76-81 and 83-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Edson [U.S. 6526581].

5. Edson was cited in the previous office action.

6. As to claims 76-78, Edson teaches the invention as claimed including: a communication system comprising:

a premises device [e.g., any of 31-43 in Fig.1] located on a customer premises and configured to transmit a plurality of communications for a plurality of services to a service provider network using a plurality of access technologies [e.g., Abstract; Fig.1]; and

an access device [e.g., 13, Fig.1] located at the customer premises and configured to receive first communications for a first service using a first access technology [e.g., an ISP using ADSL connection], determine if the first access technology is acceptable for the first service, transfer the first communications to the service provider network using the first access technology if the first access technology is acceptable for the first service [e.g., col.10, lines 24-35], and determine a second access technology different from the first access technology and transfer the first communications to the service provider using the second access technology if the first access technology is not acceptable for the first service [e.g., col.5, line 36- col.6 line 56; col.3, line 60 – col.4, line 15; col.6 line 57 – col.7, line 9; and col.10 lines 36-45; note that the selection is process a matching/comparing appropriate access technologies to the target service having a designated access technology. An acceptable access technology is one that having a source device's access technology matched to that of the target device. Thus when a first comparison does not produce a matched pair, the matching process continues until a matching is found for the source and destination devices].

7. As to claim 79, Edson further teaches that the first access technology comprises a cable access technology [e.g., 17, Fig.2].

8. As to claim 80, Edson further teaches that the second access technology comprises a wireless access technology [e.g., col.7, lines 10-15].

9. As to claim 81, Edson further teaches that the third access technology comprises a digital subscriber line (DSL) access technology [e.g., 15, Fig.2].

10. As to claims 83-88, since the features of these claims can also be found in claims 76-81, they are rejected for the same reasons set forth in the rejection of claims 76-81 above.

Claim Rejections - 35 USC § 103

11. Claims 82 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson [U.S. 6526581], as applied to claims 76-81 and 83-88 above.

12. As to claims 82 and 89, Edson teaches that the selection of external link is based on internal programming and is on a best available basis for each application [col.6, line 57 – col.7, line 9].

13. Edson is silent about basing acceptability on the type of service. However, it is obvious to one of ordinary skill in the art that type of service may be associated with predetermined access technology and having the selection criterion built into the router's internal programming in Edson's system because in reality different service types may take different preferred communication links (or access technologies). For example, accessing TV program through cable modem may be placed as a preferred choice, while DSL channel may be placed as a secondary choice when the cable traffic is momentarily congested.

Response to Applicant's Argument

14. Applicant's arguments filed on 9/26/2006 for claims 76-89 have been fully considered but they are not deemed to be persuasive.

15. In the remarks Applicant argues:

(i) With respect to the 112 first paragraph rejection, the access device is described in the specification "as a combination of one or more of a field programmable gate array (FPGA), an application specific integrated circuit (ASIC), and a digital signal processor (DSP). Additionally, the specification teaches that the FPGA, ASIC, and DSP could be configured via software to emulate a variety of access technologies, modulation schemes, standards, and protocols. One skilled in the art would recognize this teaching as software radio which, at the time the application was filed, was a well

known technology that uses software for the modulation and demodulation of radio signals. Thus, the access device recited in the claims is sufficiently supported by the specification."

(ii) With respect to the 102(e) rejection, Edson fails to disclose an access device configured to determine if a first access technology is acceptable for a first service. Furthermore, Edson fails to disclose an access device configured to determine a second access technology different from the first access technology and transfer the first communications to the service provider using the second access technology if the first access technology is not acceptable for the first service. That is, Edson's access technology is pre-determined, rather than determining the access technology on-the-fly whenever a communication is received.

16. The examiner respectfully disagrees with Applicant's remarks:

As to point (i): Applicant is reminded that U.S.C. 112 1st paragraph requires that the description of an invention be (1) in "full, clear, concise, and exact" terms as to enable any person skilled in the art to make and use the same; and (2) set forth the best mode of carrying out the invention. It is true that combinations of FPGA, ASIC and DSP with software may emulate the functions of almost everything listed in paragraphs 24-35 (disregarding what actual speed an emulator could offer). However, it is also true that a majority of computer or electronic related products may also be described as combinations of FPGA, ASIC, DSP, and software technologies. This is to say that, by

making such broad statements, Applicant has not properly responded to the question as to whether Applicant had possession of the claimed invention at the time the application was filed. And without offering the implementation details (and with best mode teachings) showing how the FGPA, ASIC, DSP and software technologies are combined, a skilled person in the field would not be able to make and use Applicant's claimed invention.

For at least the above reasons, it is submitted that Applicant has not successfully traversed the 112 rejection by showing evidences that sufficient teachings have been given in the specification.

As to point (ii): it appears that Applicant is arguing that for each received communication the system has to go over a list of testing (e.g., demodulations) to find out which access technology is appropriate without probing what modulation was originally used in the target communication devices (e.g., without relying on pre-determined information). It is submitted that such teachings are not found in the specification, and therefore it would either raise new issues in the amendment made on 2/27/2006 or the claim languages should be subjected to broader interpretations. Note that although paragraphs 7, 10 and 40 of the specification describe the selection as "dynamically determining an access technology type," or "dynamically identifying", the word "dynamic" does not necessarily mean that the determining process excludes pre-determined knowledge about the target devices' access technologies. For example, in this instant office action, the determination of an access technology type has been

construed as a comparison process matching the access technology of a target device to that of a source device through the router of Edson's gateway device. An acceptable access technology is one that having a source device's access technology matched to that of the target device. Thus when a first comparison does not produce a matched pair, the matching process continues until a match is found for the source and destination devices.

For the above reasons, it is submitted that Edson reads on the claims.

17. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571)272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

November 7, 2006

Wen-Tai Lin
11/7/06